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The UPDATE is published quarterly by and for customers, retirees, and employees of Southwestern Power Administration like:



Stan Mason **Supervisory Power** System Dispatcher Springfield, MO

Special thanks to:

Cheryl Crosswell Mike Deihl Joe Durham Jake Gage Ruben Garcia Tracey Hannon Bethel Herrold Lynn King Sharon King Jerry Martin Gene Reeves Sharren Ripley Linda Saults-Mummey

#### APRIL/MAY/JUNE FY 2000 - THIRD QUARTER REPORT

### Teaming with Power BY JAKE GAGE

The Kansas City District, U. S. Army Corps of Engineers (Corps), hosted the April 20 and 21 Federal Hydropower Conference. Representatives attended from all three Corps Divisions and six Districts and Southwestern, along with customers from within each District in Southwestern's marketing area. Attendees were welcomed by Colonel George H. Hazel, Commander of the Kansas City District.

On the first day reports were presented on the status of ongoing major rehabilitation work and studies within the Districts, and the current regional drought conditions within the Little Rock District.

Mike Hendricks, Chief of Little Rock District Reservoir Control Branch, stated that the potential exists for a serious water shortage, especially on the White River system. The long-range forecasts for temperature and precipitation show above-normal temperatures and below-normal rainfall for the next 90 days. Above normal rainfall is not forecast until October and November.

The Corps, Southwestern and its customers have developed a regional approach to mitigate the potential impact of these dry conditions. A joint agency public affairs plan is underway to inform various constituencies regarding the drought. Colonel Thomas Holden, Jr., Commander, Little Rock

District (LRD), emphasized that hydropower will be an important factor in drought contingency measures. He also mentioned that he had recently briefed the Governor of Arkansas and State water agencies.

On the second day of the Conference Ricky Bittle, Director, Planning, Rates & Dispatch, Arkansas Electric Cooperative Corporation, gave a brief history of FERC Order 2000 which would provide for the establishment of Regional Transmission Organizations (RTOs). He discussed the basic characteristics of RTOs and their minimum functions. He also spoke about the potential impacts on the traditional operations of Power Marketing Administrations (PMAs) and Corps of Engineer hydropower plants.



COL FLOR, COL HAZEL, COL HOLDEN, AND ADMINISTRATOR DEIHL

Next, each of the Corps Districts provided reports on studies outlining the impacts on Southwestern and its customers' utilization of Federal power. Among these were LRD's White River Basin Comprehensive Study and White River Minimum Flow Study, Tulsa and Little Rock Districts' Arkansas River Regional Flood Water Evacuation Study and various water supply reallocation studies.

Mike Deihl, Southwestern Administrator, stated that the PMAs have a reputation for low cost, high reliability power and it is essential that we maintain it. He cautioned that under industry restructuring, we must not let reliability concerns be overshadowed by economic factors. He also indicated that the use of Corps facilities to blackstart the system should remain a high priority.

Ted Coombes, SPRA's Executive Director, thanked the Kansas City District for hosting the conference and all the participants for the information provided. He suggested agenda items for the next meeting and reported on an upcoming Congressional briefing to be held in the White River Basin. Colonel Hazel praised the conference for its free exchange of ideas and opportunity to network with various stakeholders.

The next biannual Hydropower Conference will be held in the Dallas/ Ft. Worth area.



#### Flood of Advice About White River Drought

The drought is here. It's out of our control, but we're working cooperatively with the U.S. Army Corps of Engineers (Corps), customers, the marina operators, water associations and others to resolve issues related to it. There is a plan to deal with this situation. Even though the drought creates problems, there are certain measures that can be taken to lessen its severity. The Corps has compiled the following Talking Points and has given us permission to reprint them.

- •Below normal rainfall has prevailed over the White River basin since early last year. As a result, the five multipurpose lakes managed by the Army Corps of Engineers in the White River basin remain low. These lakes include Beaver, Table Rock, Bull Shoals, Norfork and Greers Ferry.
- Corps officials say conditions in the upper White River basin are consistent with a Level 1 mild drought, and they have been taking appropriate steps to be prepared should conditions worsen.
- Corps officials are hopeful spring rains will replenish the lakes. However, the National Weather Service long-range forecast calls for continued below normal rainfall. This would cause the lakes to get lower through the summer months.
- If conditions get worse, there will be negative impacts. Droughts do that. There are competing demands being placed on the water in these lakes that range from power generation, to drinking water supply, to recreation in the lakes, to downstream trout habitat that depends on cold water releases during hot weather. During normal times, there is ample water to meet these needs, but this is a drought. The drought is mild right now, but there are signs it could worsen.
- The Corps does not have total say over how the water in these lakes is used. Several agencies and groups with their own interests share in this responsibility. However, the Corps pledges to continue its coordination with the many interests to balance and minimize the impacts as much as possible on any one group.
- During this dry period, hydropower generation has complied with Corps guidelines, such as allowable lake draw down rates. Also, the Southwestern Power Administration (Southwestern) in Tulsa has implemented other conservation measures. In fact, there has been almost no generation at Bull Shoals or Table Rock since February. As a result, most lake levels have recovered some from where they were this past winter.
- Southwestern, which is part of the Department of Energy, controls power generation and markets electricity from the White River dams. Southwestern is working with the Corps to finetune regional plans, which also include federal dams in Oklahoma and Kansas, in case conditions worsen. More information about Southwestern's role and drought response efforts can be obtained from Sharren Ripley in Tulsa at (918) 595-6603.
- •This is a Region-wide drought that requires a regional approach to balance the demands for water from the affected lakes. Within the Corps, Fort Worth, Tulsa, Kansas City and Little Rock districts are working together with Southwestern, water associations, marina operators and others to balance the impacts.
- •The Corps' Southwestern Division is encouraging other districts to hold extra water in lakes that receive adequate spring rains (up to 15% of their flood pools) to provide extra water for power generation. This will not be possible in all reservoirs, but districts are encouraged to try. This will help ease the demand for power generation at lakes with low levels when demand for electricity increases this summer.
- Southwestern Power Administration is willing to conduct tests in the Tulsa District power plants to see if they can be used to regulate the system. If successful, this will reduce the amount of generation currently being conducted by the White River projects.
- The Corps has asked water supply associations to make plans to meet their customers' needs in case conditions worsen. While water supply withdrawals have little effect on lake levels, contingency measures might include such items as moving intake lines into deeper water and implementing conservation measures. More information about these plans can be obtained from the associations that draw water from the lakes.
- While the drought has caused low lake levels, it has provided volunteers with opportunities for shoreline cleanups. It is also an opportunity to construct low-lake level boat ramps. (If life gives you lemons, make lemon chess pie).
- Meantime, as the Memorial Day Weekend and the start of a new recreation season approach, the low lake levels are welcome when compared to wet years when lakes are high and campsites, parking lots and access roads are flooded. This year, all campsites, roads, playgrounds, trails, restrooms and parking lots are available. There is still plenty of water in the lakes for swimming, fishing, scuba diving and other activities.
- Boaters, however, are urged to use extra caution. Some launch ramps are being impaired by the low water. Also, some areas where the water is normally several feet deep are now harboring underwater obstacles. Boaters are urged to slow down, wear life jackets, and use depth finders when possible to scope out normally familiar areas.

#### Southwestern's FY 1999 Accomplishments

- While achieving success in our primary mission of marketing and delivery of Federal hydroelectric power, we are proud to report that we made progress on many fronts, including:
- Southwestern's critical systems, the SCADA and the Oracle Financial Systems, successfully transitioned to year 2000 without interruption in power delivery or financial transactions. All non-critical systems also transitioned successfully.
- The Office of Personnel Management reviewed Southwestern's Human Resources Program in FY 1999. The review resulted in an overall excellent rating in the conduct of personnel authorities, and Southwestern's award program received recognition as an innovative and successful Human Resources model for other Federal organizations.
- Monthly one-hour mandatory employee educational sessions which include information about Southwestern's relationship to customers, Corps, other stakeholders, and electrical utility issues.
- Initiated a decision template process whereby all proposed projects over \$100,000 are presented in a uniform format summarizing the project, feasible alternatives, and financial milestones. The process was implemented to bring a common approach to significant budget decisions.
- Southwestern was the Power Marketing Administration of the year for managing the best small business program within the power marketing administrations.
- Achieved a 1.3 lost time injury frequency rate compared to a 2.7 industry average rate.
- Southwestern's Tupelo, Oklahoma Maintenance Facility, was closed July 18, 1999, one year ahead of schedule.
- Developed a detailed Environmental Management Program that establishes a management process for the planning, communication, execution, and evaluation of the agency environmental program. The plan establishes performance goals and objectives to evaluate program performance.
- Converting to the use of steel poles, cross arms and other attachments to transmission structures. Steel provides significant advantages over wood in terms of loading strength, longevity and ease of installation without being more expensive.
- Conducted a customer survey. Out of a possible rating of 5, Southwestern achieved a 4.3 average, indicating that customers were very satisfied with the agency's performance.
- In FY 1999, Southwestern participated in two Hydropower Conferences that included Southwestern, the Corps, and customers. The meetings culminated with a better coordination of projects, sharing of resources, and increased understanding of common issues.
- Agreement with customer to share optical fiber facilities, which will save \$2,000,000 in construction costs.
- The co-location with the National Petroleum Technology Office (approved by the Secretary of Energy) continues to accrue annual savings of approximately \$650,000 through shared lease space, personnel support services, and material resources.

#### FY 2000 Major Goals

- Perform ongoing switch yard maintenance at Corps projects, including Dardanelle, Table Rock and Bull Shoals.
- · Address ongoing voltage problems in Arkansas.
- Southwestern's crews perform transmission structure reinforcement as part of ongoing routine line maintenance, instead of contracting for such reinforcement at higher cost, to prepare for fiber optic shield wire installation.
- Pursue completion of the Corps cost allocation for Harry S Truman to include the gas turbine alternative and a final allocation for both the full and limited operating project, which assigns all costs, including interest, investment and operations and maintenance (0&M) to the responsible purpose.
- Develop and utilize contracts which provide funds from Western Farmers Electric Cooperative for purchase of future power and wheeling expenses.
- Complete and implement contractual arrangements with 11 member distribution cooperatives of Cajun Electric Power Cooperatives to realign power allocations to them and begin delivery of such power through the successor scheduling agent.
- Complete annual power repayment studies for the integrated system, Sam Rayburn and Robert D. Willis projects to assure proper repayment progress, and file rates to adjust, if necessary.
- Cyber Security Refine developed plan, assess risk assessment for threats and establish counter measures.
- Support SPP efforts to create an RTO and position Southwestern to participate through revision of the SPP membership agreement.



CHIP TAYLOR, WOODY FUGATE,
TEDDY BELLERS, AND DAVE DARNELL



LARRY JONES, JEFF HUDSON, TED COOMBES, JERRY MARTIN, RICK HENLEY, MONA SIMON



TIM MEEKS, MIKE DEIHL, AND BOB PORTER

### **SPRA TALK**

The following are highlights of the presentation by Southwestern Administrator Michael Deihl at the 43rd Southwestern Power Resources Association annual meeting, held in Tulsa, Oklahoma on April 6, 2000.

#### **DOE** Proposed Restructuring Legislation

The Comprehensive Electricity Competition Act proposed by the Administration would amend portions of Parts II and III of the Federal Power Act and would apply to Southwestern Power Administration (Southwestern) with respect to the transmission of electric energy over Southwestern's systems and the provision of necessary services. The changes to the act would be applicable to Southwestern beginning October 1, 2001.

#### **Industry Restructuring**

Southwestern's role as a transmission provider has been changing rapidly as a result of open access transmission and industry restructuring; and more changes are anticipated. Southwestern's Open Access Transmission Tariff applies only to the use of its transmission system for the delivery of non-Federal power and energy.

On February 12, 1999, The Federal Energy Regulatory Commission (FERC) approved Southwestern's revised Standards of Conduct filing. Starting April 1, 1999, Southwestern began operating under the Southwest Power Pool (SPP) regional tariff for both long-term and short-term transmission transactions.

Effective February 1, 2000, all requests for non-Federal transmission service using Southwestern's transmission facilities must be referred to the SPP.

Cooperating with the Department of Energy's (DOE) interest in promoting Regional Transmission Organizations (RTOs), Southwestern has also been working with the SPP in the development of an RTO in accordance with FERC Order No. 2000, and is participating in an expanded regional tariff that includes network transmission service.

#### Rates

Analysis of the Integrated System rates during FY 1999 indicated that they were sufficient to meet repayment criteria. However, Southwestern did prepare a filing to address minor revisions in the rates

schedules which was approved by the Department of Energy and later approved by FERC. The Secretary of Energy approved a one-year extension of the Sam Rayburn Dam Project rate. An annual revenue increase of approximately \$35,000 for the Robert D. Willis Project was also approved by the Secretary and subsequently approved by FERC.

#### System Conditions

Generation from Southwestern's 24 projects in FY 1999 was about 6.7 million MWh, about 120 percent of average. Inflows into the 13-reservoir interconnected system was about 200 percent of median; however, much of the inflow occurred in the Arkansas River basin in a few months and only resulted in additional spill as the U.S. Army Corps of Engineers (Corps) release requirement exceeded what the turbines could generate.

#### **Purchase Power and Wheeling Program**

Southwestern's Purchase Power and Wheeling program provides for purchasing non-Federal energy as necessary to supplement hydroelectric generation to meet contractual obligations with 93 customers for average hydropower generation.

In the summers of FY 1998 and FY 1999, Southwestern made use of its Continuing Fund authority to meet purchase power obligations. This was due to drought conditions during critical months for most of the areas that contribute inflows into Southwestern's reservoir system. Continuing Fund dollars have been replenished by customer receipts.

Purchased energy was also needed because of record peak electrical demand, diminished energy bank availability, and as many as seven hydropower units being out of service. Without sufficient inflow, Southwestern would have to purchase energy under its Continuing Fund authority in FY 2000.

Southwestern is seeking authority to utilize revenues to finance purchased power and wheeling expenses previously funded by direct appropriations. The agency will end the financing of purchased power and wheeling through direct appropriations at the close of FY 2004. The new authority would be in addition to existing authorities used to finance purchased power and wheeling activities, such as net billing, bill crediting, reimbursable authority, and the Continuing Fund.

Southwestern is also establishing contractual arrangements with some of its customers to provide advance funding for Southwestern's purchase power and wheeling activities. The arrangements are being established to address the phase-out of direct appropriations to fund purchase power and will allow Southwestern to continue its existing contractual obligations and marketing plan.

#### Memorandum of Agreement

On October 28, 1999, The U.S. Army Corps of Engineers (Corps), Southwestern, and their customers finalized a Memorandum of Agreement which provides for identifying, prioritizing and funding certain maintenance, rehabilitation, or modernization activities at hydroelectric facilities of the Corps.

#### Fiber Optics Ground Wire

Southwestern has installed 411 miles of optical ground wire (OPGW) on its transmission structures in Northeast Arkansas, Southeast Missouri, and Southwest Missouri. In FY 2000, there are plans to install 23 miles of OPGW.

Southwestern is entering into joint partnerships with other utilities to offset the cost required to install communications for the purpose of monitoring and controlling the operation of the electric power system. Southwestern has licensed 39 miles of six dark fiber strands to KAMO Power. In exchange, Southwestern has access to six dark fiber strands over a portion of KAMO's transmission system to support the agency's operational communications.

# Continuing Our Mission

Of course, most important is the mission of marketing and delivering Federal power to preference public bodies and cooperatives and implementing public policy. In the ongoing commitment to public service, Southwestern continues to search for ways to maximize the use of assets to repay the Federal investment while balancing power needs with diverse water resource users, and sustain this effort through the lowest cost-based rates in a professional manner using good common business sense.



BILL GOSHORN AS
TEDDY ROOSEVELT



GARY SWARTZLANDER AS UNCLE SAM



TED COOMBES PRESENTS MAGIC BASS SINGING PRAISES TO BARBARA OTTE.



Bonneville Manager of Federal Hydro Projects Roy Fox was the annual meeting keynote speaker.



BARBARA DELGROSSO AND DIANE WATSON HOLDING THE TORCH FOR LIBERTY.



GENE REEVES IS DANDY AS YANKEE DOODLE AND MIKE DEIHL'S GEORGE WASHINGTON TELLS NO LIES.

## Educating Southwestern BY SHARON KING

The sixth session in Southwestern's FY 2000 mandatory training took place on March 6. The topic was the Budget Template Process, ably presented by Budget Officer Bobbi Sigworth and General Counsel Larry Yadon.

Southwestern began using the budget template process in 1999 to review and justify requests for items in excess of \$100,000, both for existing programs and proposed expenditures. Requesters are asked to list the costs associated with the request, its benefits and what alternatives have been considered.

Southwestern's seventh mandatory training session of Fiscal Year 2000 was held on April 3. The topic, presented by hydraulic engineers Bethel Herrold and George Robbins, was Competing Uses.

The presentation was an explanation of who Southwestern competes with for water usage and how the various users work together to maximize usage of this precious and limited resource.



Vying for water usage with Southwestern are interests representing flood control, water supply, navigation, lake recreation, downstream recreation, special events recreation, and fish and wildlife. Bethel explained that all Southwestern projects have at least two designated functions: flood control and hydropower.

The amount of available water is static while demand for it is ever-increasing, as is the political influence of other users. Because of these factors, Southwestern is striving to work cooperatively with other water users to avoid or minimize negative effects to hydropower.

Representatives of the agency are also taking a leadership role in hydro-related organizations and special groups, getting the hydropower message across.

### Let's Make a Land Deal!

#### BY SHARREN RIPLEY

In a move that can only be described as beneficial to all, City Utilities of Springfield and Southwestern Power Administration exchanged parcels of land on April 7, 2000.

The transaction was initiated by City Utilities in an effort to expand their substation in front of Southwestern's old Operations Building.

The piece of land signed over to them is slightly less than half an acre. In turn, they signed over to Southwestern a piece of land approximately 4.75 acres in size, on which a road will be built to facilitate access to the Nixa substation.

The papers were signed by Southwestern Realty Officer Linda Saults-Mummey and Jon Campbell, Property Acquisition Administrator for City Utilities.



CITY UTILITIES' NEW ACQUISITION IN SPRINGFIELD.



JON CAMPBELL AND LINDA SAULTS-MUMMEY SEAL THE DEAL.



SOUTHWESTERN'S NEW PROPERTY AT NIXA.

# Low Voltages Spark Action BY JOE DURHAM

Last summer, in the South-Central, Midwestern and Northeastern regions of the United States, there were several different occasions where significant problems developed on major electric power systems, resulting in either outages, severe voltage decline, or both. Some of these outage/low-voltage events are described in the March, 2000 report of the U.S. Department of Energy's Power Outage Study Team (POST): "Findings and Recommendations to Enhance Reliability from the Summer of 1999."

One of the low-voltage events which was not mentioned in the POST report occurred on August 13, when voltages at several substations located in Southern Missouri and Northern Arkansas were depressed as much as 10 percent below the normal system rating.

As a result of the events of August 13, the Southwest Power Pool (SPP) and two members of the Southeast Reliability Council have assembled a multi-regional team to study the low voltage situation and to make specific recommendations on how to prevent and/or reduce the impact of further low voltage problems in these areas.

Members of the group include representatives from Arkansas Electric Cooperative, Associated Electric Cooperative, Central Southwest, Empire District Electric, Entergy Corporation, Oklahoma Gas and Electric and the Southwestern Power Administration.

"One of the challenges that our team faces is to determine just how low voltages can go before we encounter a situation which could cause a collapse of the system," said Electrical Engineer Joe Durham, who represents Southwestern on the study group.



"We will need to identify the key sites to be monitored (substations and transmission lines) which can serve as early warning indicators of impending voltage collapse. Then we can establish minimum margins that our operations people can use to guide the levels of power transfer within and across the region."

The first report from the group is planned to be published on SPP's website at WWW.SPP.ORG during June, 2000. This report will focus on what operational steps should be taken to mitigate the problem during this summer. At least one additional report, which will include recommendations for modifications or additions to facilities, is planned to be issued for later this fall.

If you have any questions or comments on the activities of this group please contact Joe Durham at (918) 595-6706 or DURHAM@SWPA.GOV. The POST report is available from the DOE website at DOE.GOV.

### Two In A Row BY SHARON KING

Pictured is the "Best of the Best" award, presented to Southwestern on February 29, 2000, from the Greater Tulsa Area United Way, for the second consecutive year.

Southwestern was the only one of 50 local Federal agencies to earn this prestigious award for the 1999 (and 1998) Combined Federal Campaign. Criteria for the award: achieving minimum per capita giving of \$200 and having 75% or more of employees participating.

The hard work and generosity of Southwestern Federal and contractor employees made it happen.

COLIN KELLEY AND KEN LEGG POSE WITH THE UNITED WAY "BEST OF THE BEST" AWARD



#### Malinovsky Heads East

Joe Malinovsky
was selected for
Supervisory
Management and
Operations
Specialist in April
of this year in the DOE Headquarters
office of the Assistant Secretary for
Energy Efficiency and Renewable
Energy. He had served Southwestern
for eight years as Director, Division
of Acquisition, Property, Safety and
Environmental Management.



Roy Frailicks, Equipment Operator Roger Lively, Equipment Operator Victor Sacket,

System Meter & Relay Craftsman Scott Holland, Student Trainee (Engineering)



#### BY CHERYL CROSSWELL

Southwestern Power Administration Celebrated African-American History Month on Thursday, February 24, 2000, with a program of choral selections, interpretative speeches, and a speaker.

After a welcome by Administrator Mike Deihl, four award-winning competitive speech students from Southwestern's Adopt-A-School, Carver Middle School, gave interpretative speeches.

Hannibal Johnson, Esq, author of "Black Wall Street



HANNIBAL JOHNSON, ESQ.

- From Riot to Renaissance In Tulsa's Historic Greenwood District" and "Up From the Ashes – A Story About Community," gave an excellent keynote speech on the 1921 Tulsa race riot and the Historic Greenwood District. ▲